

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A portable electronic device comprising:

 a first manipulator means for supplying a signal for performing a first screen process on information displayed on a display;

 a second manipulator means for supplying a circumferential movement signal for performing a second screen process on the information displayed on the display, said second manipulator means including a ring-shaped manipulator having an inner circumference side, an outer circumference side, and a bottom surface, said second manipulator means for supplying the circumferential movement signal according to said ring-shaped manipulator means; and

 a controller for interfacing with said first manipulator means, said second manipulator means, and the display, wherein:

 said first manipulator means is arranged at either the inner circumference side or the outer circumference side of said ring-shaped manipulator;

 responsive to the signal supplied from said first manipulator means, said controller is operable to perform the first screen process by scrolling the information displayed on the display and selecting a display position; and

 responsive to the circumferential movement signal supplied from said second manipulator means, said controller is operable to perform the second screen process, the second screen process being one of a process of scaling up the same information displayed on the display and scaling down the same information displayed on the display, ~~and switching a screen of information displayed on the display~~ with the selected display position as a reference.

Claim 2 (Cancelled)

Claim 3 (Previously Presented) The portable electronic device of Claim 1, wherein:

 said ring-shaped manipulator is operable to rotate circumferentially; and

 said second manipulator means includes a rotation detector for detecting a direction and an amount of rotation of said ring-shaped manipulator.

Claim 4 (Previously Presented) The portable electronic device of Claim 3, wherein:

said rotation detector is arranged so as to interface with the bottom surface of said ring-shaped manipulator; and

said rotation detector comprises:

a ring magnet magnetized according to alternating north and south poles at intervals of an equal angle, and fixed on the bottom surface of said ring-shaped manipulator; and

a pair of magnetic sensors arranged so as to be opposed to said ring magnet and arranged with a predetermined clearance between said pair of magnetic sensors and said ring magnet; and

said rotation detector is operable to detect movement of said ring magnet in relation to said pair of magnetic sensors.

Claim 5 (Previously Presented) The portable electronic device of Claim 3, wherein said controller is operable to perform the second screen process according to the detected direction and the amount of rotation of said ring-shaped manipulator.

Claim 6 (Currently Amended) A portable electronic device comprising:

a circular rubber manipulator having a front and a back;

a first manipulator means for supplying a signal for performing a first screen process on information displayed on a display, said first manipulator means arranged to interface with the back of said circular rubber manipulator;

a second manipulator means for supplying a circumferential movement signal for performing a second screen process on the information displayed on the display, said second manipulator means arranged to interface with the back of said circular rubber manipulator; and

a controller, wherein:

said first manipulator means includes a press button and a self-restoring contact opposed to said press button;

said second manipulator means comprises:

a ring-shaped conductive depressing portion; and

a plurality of concentrically disposed second contacts opposed to said ring-shaped conductive depressing portion with a predetermined clearance between said plurality of concentrically disposed second contacts and said ring-shaped conductive depressing portion;

said controller is operable to perform the first screen process by scrolling the information displayed on the display and operable to select a display position according to the signal supplied from said first manipulator means; and

said controller is operable to perform the second screen process, the second screen process being one of a process of scaling up the same information displayed on the display[[,]] and scaling down the same information displayed on the display, ~~and switching a screen of information displayed on the display~~ with the selected display position as a reference, according to the circumferential movement signal supplied from said second manipulator means.

Claim 7 (Previously Presented) The portable electronic equipment of Claim 6, wherein:

said controller is operable to perform the first screen process according to an actuation of said self-restoring contact by said press button;

said controller is operable to detect a direction of a circumferential sliding operation of said circular rubber manipulator, and operable to detect an amount of directional rotation of said circular rubber manipulator caused by the circumferential sliding operation; and

said controller is operable to perform the second screen process according to the detected direction and the amount of directional rotation of said circular rubber manipulator.

Claims 8-9 (Cancelled)

Claim 10 (Previously Presented) The portable electronic device of Claim 6, wherein said first manipulator means is arranged at an outer circumference of said second manipulator means, and wherein said first manipulator means includes a conductive depressing portion and a first contact opposed to said conductive depressing portion.

Claim 11 (Previously Presented) The portable electronic device of Claim 6, wherein said first manipulator means is operable to detect operation within a same plane in a direction different from that of said second manipulator means.

Claim 12 (Previously Presented) The portable electronic device of Claim 6, wherein said circular rubber manipulator includes an indication means for indicating a position of said first

manipulator means.

Claim 13 (Previously Presented) The portable electronic device of Claim 1, wherein said first manipulator means is a multi-directional switch operated by one of depressing and tilting.

Claim 14 (Previously Presented) The portable electronic device of Claim 1, wherein said first manipulator means is a track ball.

Claim 15 (Previously Presented) The portable electronic device of Claim 1 further comprising an integrated display device.

Claim 16 (Previously Presented) The portable electronic device of Claim 6 further comprising an integrated display device.